Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (*Currently amended*) A method for managing a plurality of databases containing gene expression data and related data corresponding to a plurality of gene fragments, the method comprising:

storing the gene expression data in a gene expression database, wherein the gene expression data is obtained from microarrays;

storing the related data in separate databases comprising a sample database and a gene fragment index database;

grouping the plurality of gene fragments into at least two gene fragment classes according to at least one attribute of a plurality of attributes of the gene expression data and related data, the plurality of attributes selected from the group consisting of sample data, gene fragment index data, experiment data, and expression results, wherein the sample data resides in the sample database and includes information corresponding to one or more of clinical data, donor, organ, tissue, disease, pathology, genomics, medications and preparation, wherein the gene fragment index data resides in the gene fragment index database and includes one or more of known versus unknown standardized identifier, gene fragment identity, gene sequence, gene pathway and chromosome location, and wherein expression results include information corresponding to one or more of call value, expression level, fold change, up-regulated versus down-regulated;

communicating between the separate databases, a user interface and a runtime engine using a CORBA interface; and

using a relational format, generating a plurality of links between the gene expression database and the separate databases for linking the gene expression data for each gene fragment to the at least one attribute corresponding to the gene fragment class into which the gene fragment is grouped;

wherein a user query comprising a selection of one or a combination of attributes produces a result comprising a subset of the gene expression data and the related data